Amendments to the Claims

This listing of the claims will replace all prior versions and listings of the claims in the application.

1. (previously presented) A method of performing server-side processing of postback input received from a client and associated with a client-side user interface element, the method comprising:

examining the postback input received from the client to determine an identifier of a target server-side control object;

identifying the target server-side control object based on the identifier of the target server-side control object;

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

2. (original) The method of claim 1 wherein the processing operation comprises changing a property of the target server-side control object; and further comprising:

generating authoring language data from the target server-side control object based on the property to define the client–side user interface element for transmission to the client.

3. (original) The method of claim 1 wherein the processing operation comprises raising a server-side event from the target server-side control object; and further comprising:

generating authoring language data from the target server-side control object based on the server-side event to define the client–side user interface element for transmission to the client.

4. (original) The method of claim 2 further comprising:

creating a plurality of server-side control objects in a server-side control object hierarchy, prior to the operation of processing the postback input; and

terminating the plurality of server side control objects, after the operation of generating authoring language data.

5. (original) The method of claim 2 further comprising:

searching for the target server-side control object in a server-side control hierarchy based on the identifier;

creating the target server-side control object in the server-side control hierarchy, if the target server-side control object is not found by the searching operation; and

terminating the server-side control hierarchy, after the operation of generating authoring language data.

6. (original) The method of claim 1 wherein the identifier has a hierarchical identifier structure indicating a plurality of levels in a server-side control object hierarchy including a plurality of member server-side control objects, and the operation of identifying the target server-side control object comprises:

extracting a node level identifier from the identifier;

passing the node level identifier to a member server-side control object corresponding to the node level identifier;

identifying the member server-side control object as the target server-side control object, if the node level identifier identifies a leaf node of the identifier;

extracting a next node level identifier from the identifier of the target server-side control object, if the node level identifier does not identify a leaf node of the identifier, wherein the next node level identifier identifies a child server-side control object of the member server-side control object; and

performing recursively the passing and identifying operations and the operation of extracting a next node level identifier using the next node level identifier as the node level identifier and the child server-side control object as the member server-side control object, if the node level identifier does not identify a leaf node of the identifier.

7. (original) The method of claim 1 wherein the operation of processing the postback input comprises:

storing a postback data value as a property the target server-side control object.

8. (original) The method of claim 7 wherein the target server-side control object initially stores an old data value as a property, and the operation of storing a postback data value comprises:

associating the postback data value with the property;

indicating a data change associated with the target server-side control object, if the postback data value passed to the target server-side control object is different than the old data value of target server-side control object; and

replacing the old data value with the postback data value in the target server-side control object.

9. (original) The method of claim 8 further comprising:

raising a server-side data change event after the operation of replacing of the old data value, if a data change is indicated.

10. (original) The method of claim 7 wherein the target server-side control object is one of a plurality of member server-side control objects in a server-side control object hierarchy, and the operation of storing a postback data value comprises:

storing postback data values for all of the member server-side control objects in the server side control object hierarchy; and

raising at least one server-side data change event after the operation of storing a postback data value for all member server-side control objects, if at least one data change is indicated.

11. (original) The method of claim 10 further comprising:

receiving the server-side data change event from the target server-side control object; and

invoking a function of a non-user-interface server component, based on the server-side data change event.

12. (original) The method of claim 1 wherein the operation of processing the postback input comprises:

processing a postback event using the target server-side control object.

13. (original) The method of claim 12 wherein the operation of processing a postback event comprises:

extracting from the postback input a postback event argument associated with the identifier;

passing the postback event argument associated with the identifier to the target server-side control object; and

processing the postback event argument using the target server-side control object.

14. (original) The method of claim 13 wherein the operation of processing a postback input further comprises:

raising a server-side event from the target server-side control object, responsive to the operation of processing the postback event argument.

15. (original) The method of claim 14 further comprising:

receiving the server-side event from the target server-side control object; and

invoking a function of a non-user-interface server component, based on the server-side event.

16. (previously presented) A computer data signal embodied in a carrier wave by a computing system and encoding a computer program for executing a computer process performing server-side processing of postback input received from a client and associated with a client-side user interface element, the computer process comprising:

examining the postback input received from the client to determine an identifier of a target server-side control object;

identifying the target server-side control object based on the identifier of the target server-side control object;

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

17. (previously presented) A computer program storage medium readable by a computer system and encoding a computer program for executing a computer process performing server-side processing of postback input received from a client and associated with a client-side user interface element, the computer process comprising:

examining the postback input received from the client to determine an identifier of a target server-side control object;

identifying the target server-side control object based on the identifier of the target server-side control object;

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

18. (original) A computer program product for processing postback input received from a client and associated with a client-side user interface element, the computer process comprising:

creating a plurality of server-side control objects in a server-side control object hierarchy, the server-side control object hierarchy including a target server-side control object associated with the client-side user interface element;

passing the postback input to the target server-side control object;

processing the postback input received by target server-side control object; and

generating authoring language data from the plurality of server-side control objects to define a web page for display on a client.

19. (original) The computer program product of claim 18 wherein the computer process further comprises:

receiving an identifier associated with the target server-side control object; and

identifying the target server-side control object within the server-side control object hierarchy, based on the identifier.

20. (original) The computer program product of claim 18 wherein the computer process further comprises:

terminating the plurality of server side control objects, after the operation of generating authoring language data.

21. (previously presented) A method comprising:

examining input data received from a client to identify a corresponding target server-side control object, the input data being associated with a client-side user interface element; and

passing the input data to the identified target server-side control object to process the input data.

22. (previously presented) A computer program product embodied on a computer program storage medium readable by a computer system for executing a computer process, the computer process comprising:

examining input data received from a client to identify a corresponding target server-side control object, the input data being associated with a client-side user interface element; and

passing the input data to the identified target server-side control object to process the input data.

23. (previously presented) A computer system comprising:

a plurality of server-side control objects in a server-side control object hierarchy on a server, the server-side control object hierarchy including a target server-side control object associated with a client-side user interface element on a client, such that input data received by the server from the client-side user interface element is passed within the server to the target server-side control object in the server-side control object hierarchy; the plurality of server-side control objects generating authoring language data to define a web page for display on the client.

24. (previously presented) A computer program product embodied in a computer readable medium for executing a computer process, the computer process comprising:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on a client, the authoring language data including a script that is tagged to be executed by the server to process input data received from the client.

25. (previously presented) The computer program product of claim 24, wherein each server-side control object corresponds to a client-side user interface element.

26. (previously presented) A method comprising:

generating authoring language data from a plurality of server-side control objects at a server to define a web page for display on a client, the authoring language data including a script that is tagged to be executed by the server to process input data received from the client.

27. (previously presented) A method comprising:

receiving input data from the client at the server, the input data being associated with an individual client-side user interface element on the client;

generating a hierarchy of server-side control objects on a server, each server-side control object corresponding to a client-side user interface element on a client;

identifying a server-side control object in the hierarchy to which the individual client-side user interface element corresponds; and

processing the input data using the identified server-side control object.

28. (previously presented) The method of claim 27 wherein the processing operation comprises:

setting a property value of the identified server-side control object based on the input data.

29. (previously presented) The method of claim 27 wherein the processing operation comprises:

raising an event in the identified server-side control object based on the input data.

30. (previously presented) The method of claim 27 further comprising:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the page including the individual client-side user interface element.

31. (previously presented) The method of claim 27 further comprising:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the authoring language data including a script that is tagged to be executed by the server to process input data received from the client.

32. (previously presented) A computer program product embodied in a computer readable medium for executing a computer process, the computer process comprising:

receiving input data from the client at the server, the input data being associated with an individual client-side user interface element on the client;

generating a hierarchy of server-side control objects on a server, each server-side control object corresponding to a client-side user interface element on a client;

identifying a server-side control object in the hierarchy to which the individual client-side user interface element corresponds; and

processing the input data using the identified server-side control object.

33. (previously presented) The computer program product of claim 32 wherein the processing operation comprises:

setting a property value of the identified server-side control object based on the input data.

34. (previously presented) The computer program product of claim 32 wherein the processing operation comprises:

raising an event in the identified server-side control object based on the input data.

35. (previously presented) The computer program product of claim 32 wherein the computer process further comprises:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the page including the individual client-side user interface element.

36. (previously presented) The computer program product of claim 32 wherein the computer process further comprises:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the authoring language data including a script that is tagged to be executed by the server to process input data received from the client.

37. (previously presented) A method comprising:

creating a plurality of server-side control objects in a server-side control object hierarchy, the server-side control object hierarchy including a target server-side control object associated with the client-side user interface element;

passing the input data to the target server-side control object;

processing the input data received by target server-side control object; and

generating authoring language data from the plurality of server-side control objects to define a web page for display on a client.